

CENTERS for MEDICARE & MEDICAID SERVICES

Medicaid Statistical Information System (MSIS) State Summary Web Cube User Guide

March 2004

Order Number CM-01-01175 Document Control Number 1289 Contract GS-35-5357H

Prepared by ViPS

One West Pennsylvania Avenue Towson, Maryland 21204

Table of Contents

Introduction	1
What is MSIS?	1
Understanding Data Cubes	1
Special Note	1
State Summary Measures	2
Changing Measures	4
Removing Summary Rows and Columns	12
Calculating Measures	14
State Summary Dimensions	20
Understanding Dimension Values	20
Changing Dimensions	22
Troubleshooting Display Problems	38
All Zeros (0) in Cells	38
Not Applicable (NA) in Cells	41
Zeros (0) in Cells for Lower Level Dimensions	44
Helpful Hints	48
Faster Response Time	48
Undo Selection	
Additional Help	

Appendix A: MSIS State Summary Data Cubes

Notes:

ii March 2004

Introduction

What is MSIS?

The Medicaid program began in 1965 with the passage of Title XIX of the Social Security Act. More than thirty years later, Medicaid still provides low-income and disabled Americans of all ages with access to medical and health-related services. Additionally, under the State Child Health Insurance provisions – SCHIP (Title XXI) of the Social Security Act, as included in the Balanced Budget Act of 1997, coverage to children otherwise not eligible for Medicaid is administered in some States as an expansion to Medicaid.

Medicaid is a federal-state partnership. The federal government partially funds the program and establishes mandatory and optional program characteristics. The States provide the remaining program funding, choose which program options that they wish to implement, and directly administer the program in their State.

Under the Balanced Budget Act of 1997, as of 1/1/99, it is mandatory that States report Medicaid data through the Medicaid Statistical Information System (MSIS) system. This system requires the States to submit raw eligibility and claims data to the Centers for Medicare and Medicaid Services (CMS). MSIS data is used by CMS to produce Medicaid program characteristics and utilization information. MSIS data is made available to States and other federal agencies in order to gain greater insight into the Medicaid program.

The MSIS State Summary data mart consists of enrollment, demographic, and claim information for each Medicaid fiscal year. The information is stored in a data cube and is viewed using Cognos PowerPlay Web.

Understanding Data Cubes

A *data cube* is a method of displaying dimensions and measures. Two cubes are provided from the MSIS State Summary data mart for each Medicaid fiscal year. One cube contains measures and dimensions relevant to monthly eligibility statistics. The other cube provides quarterly and annual measures and dimensions for both eligibility and claim information.

A *measure* is a count or summarization of Medicaid information. Some of the measures in the MSIS data cubes are Total Months Eligible Count and Total Medicaid Paid Amount.

A *dimension* is a description or characteristic of the measure. Characteristics of Total Months Eligible Count include Maintenance Assistance Status (MAS) and Basis of Eligibility (BOE). Characteristics of Total Medicaid Paid Amount include Service Type and Program Type.

Special Note

This documentation describes the PowerPlay interface using Microsoft Internet Explorer version 5.5 or higher. See the on-line Help ? for assistance with the features and functions of the interface when using an older version of IE or another browser application.

State Summary Measures

The MSIS data is summarized into eligibility and claim related measures. The measures in the State Summary quarterly cube are:

- Encounter Total Claims Count
- Inpatient Discharge Total Count
- Total Claims Count
- Total Days of Care Count
- Total Medicaid Paid Amount
- Unique Beneficiaries Count
- Unique Eligibles Count
- Unique Encounter Beneficiaries Count
- Unique Enrollees Count*

The measures in the State Summary monthly cube are:

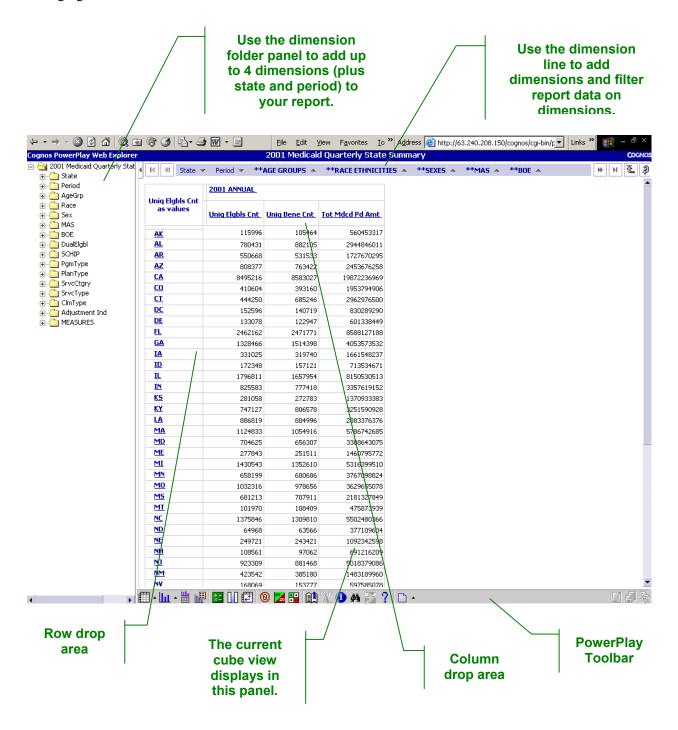
- Eligible Full Period Count
- Total Months Eligible Count
- Unique Eligibles Count
- Unique Enrollees Count*~

A description of each measure is listed in *Appendix A: MSIS State Summary Data Cubes*.

^{*}NOTE: The Unique Enrollees Counts are only calculated when Plan Type is one of the dimensions. When Plan Type is not a selected dimension, these values are zero.

[~]NOTE: The Unique Enrollees Count is not included in the monthly cube for FY 1999.

When you open PowerPlay Web, the application displays the default view of the report. It shows the states listed down the left as the rows. The year and measures (Unique Eligibles Count, Unique Beneficiaries Count, and Total Medicaid Paid Amount) are listed at the top as the columns. You can now customize the display by adding dimensions, changing measures shown, filtering on dimensions, and changing the format.

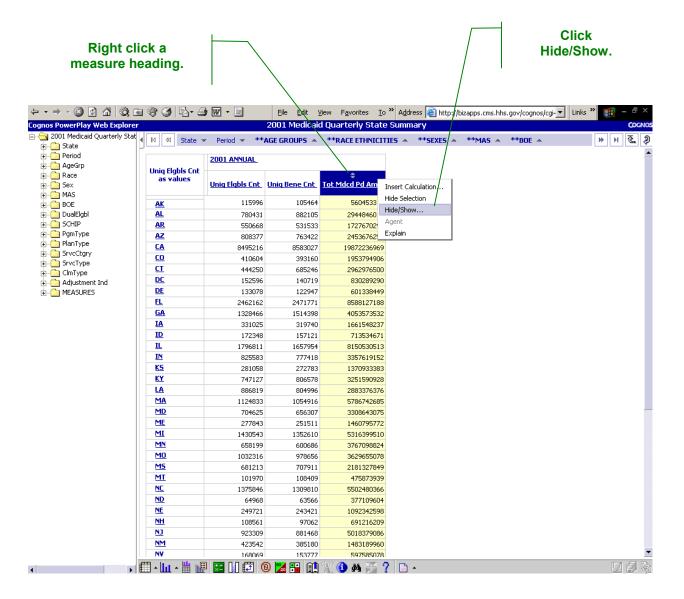


Changing Measures

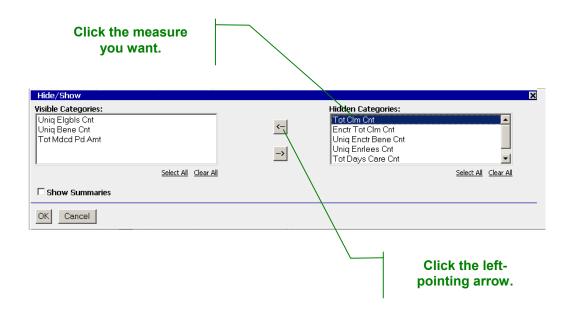
The application displays the Unique Eligibles Count, Unique Beneficiaries Count, and Total Medicaid Paid Amount measures by default. You can choose to view any combination of measures. You must display at least one measure.

Follow these steps to display only one measure.

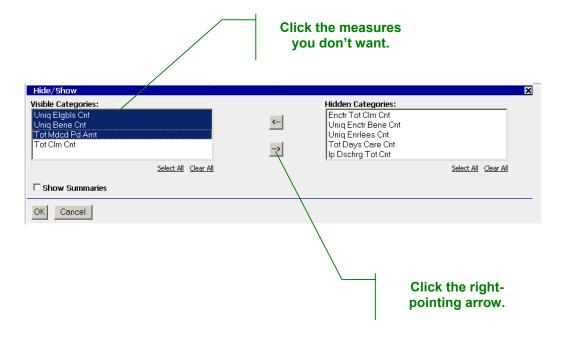
- 1. Right click the heading of any measure. A menu displays.
- 2. Select **Hide/Show...**. The Hide/Show window displays.



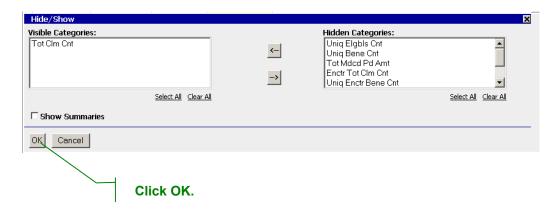
3. Click the measure you want and use the left-pointing arrow to move it to the Visible Categories window.



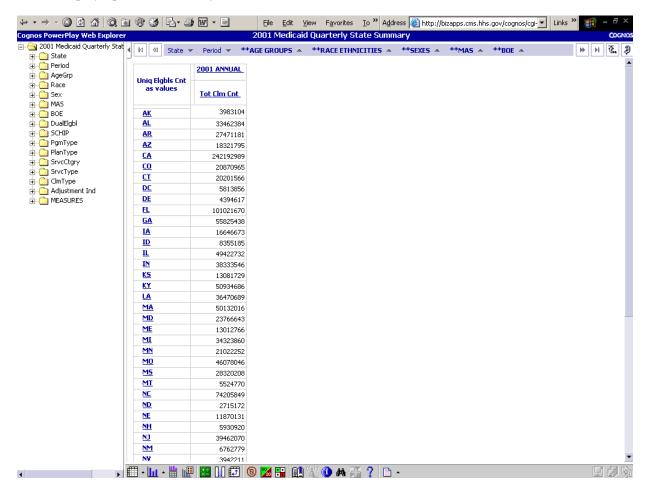
4. Click all the other measures and use the right-pointing arrow to move them to the Hidden Categories window.



5. When the measure you want is the only one in the Visible Categories window, click **OK**.

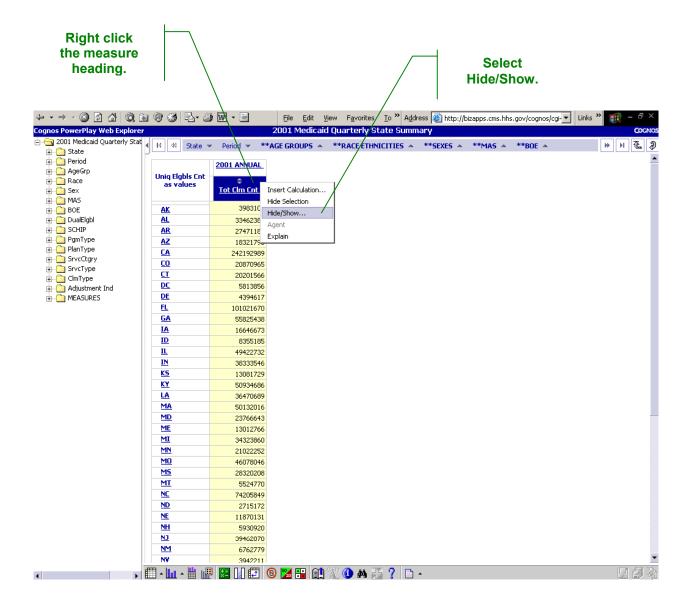


6. The display updates based on your selection.

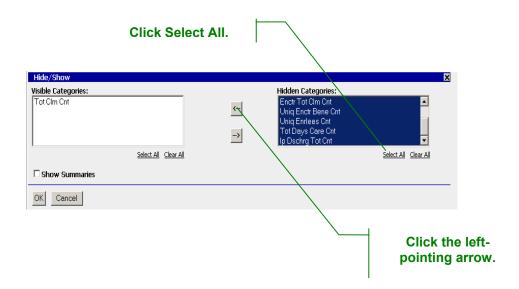


Follow these steps to display all measures.

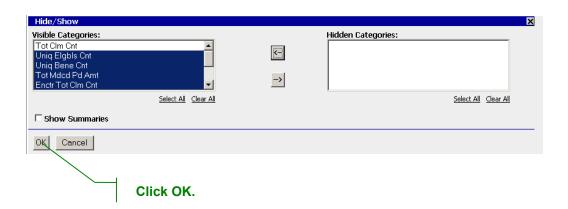
- 1. Right click the measure heading. A menu displays.
- 2. Select **Hide/Show...**. The Hide/Show window displays.



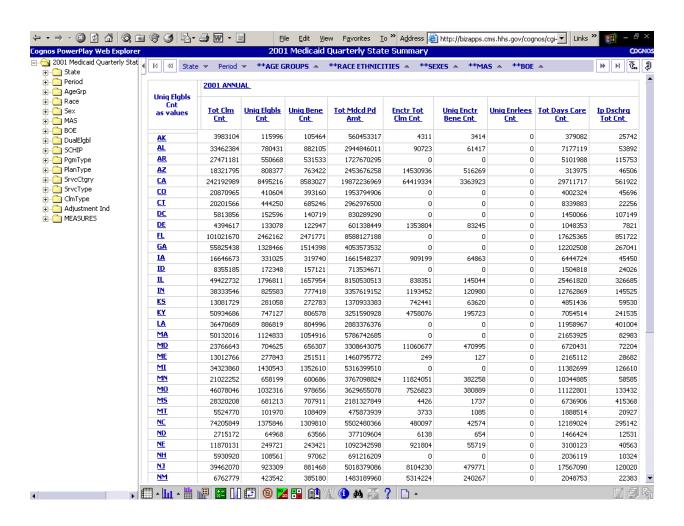
- 3. Click **Select All** under the Hidden Categories window to highlight all the measures.
- 4. Click the left-pointing arrow to move all the measures to the Visible Categories window.



5. When all the measures are in the Visible Categories window, click **OK**.

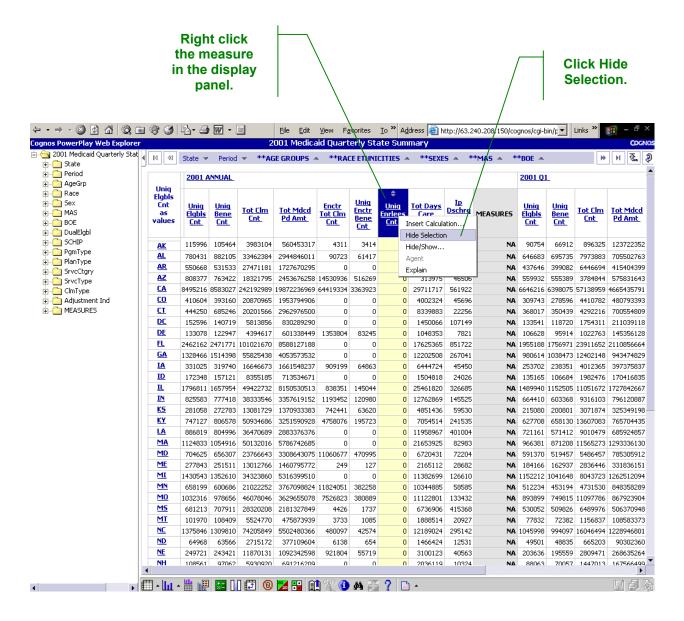


6. The display updates based on your selection.

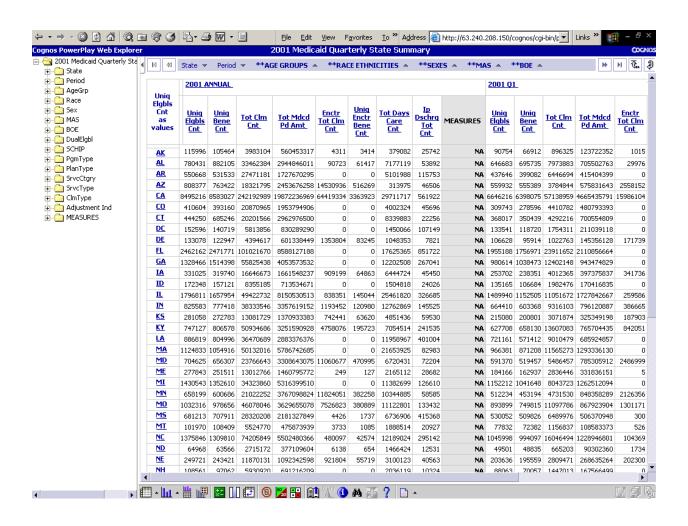


Follow these steps to remove a measure from the display.

- 1. In the display panel, right click the measure you want to remove. A menu of available functions displays.
- 2. Click Hide Selection.



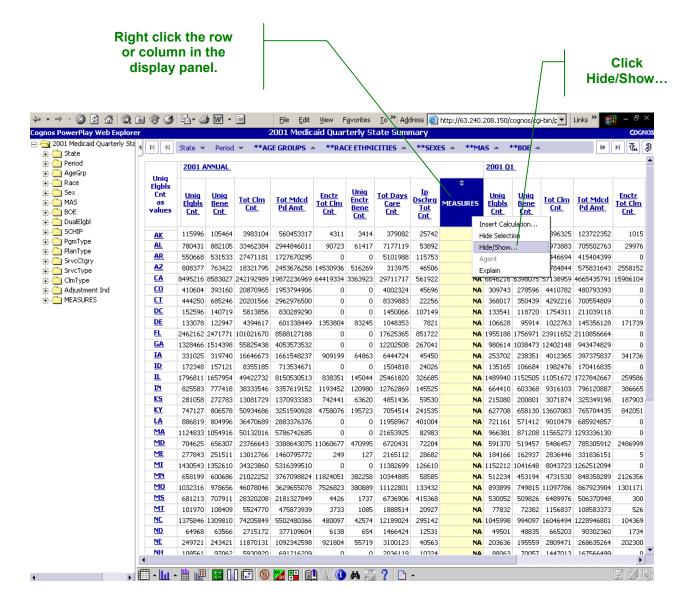
3. The display updates based on your selection.



Removing Summary Rows and Columns

PowerPlay includes summary rows and columns in the display. Because the values in the State Summary cubes have been pre-aggregated, these summaries contain 0 or NA. Follow these steps for each level (dimension or measures) to remove the summary rows and columns from the display.

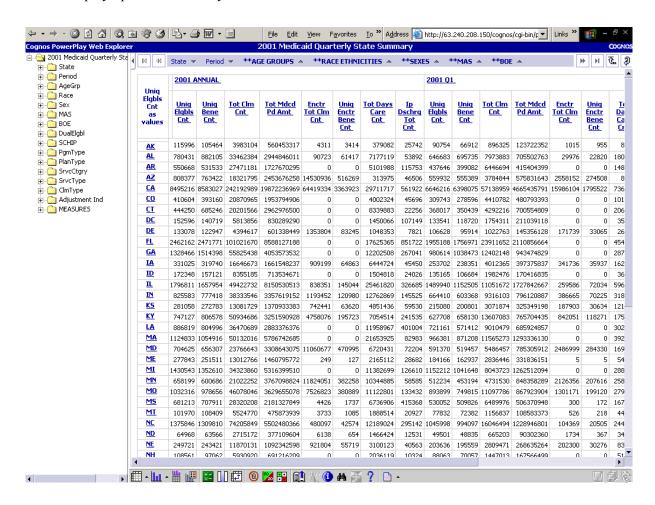
- 1. In the display panel, right click the row or column you want to remove. A menu of available functions displays.
- 2. Click **Hide/Show...**. The Hide/Show window displays.



3. In the Hide/Show window, clear the **Show Summaries** check box. Click **OK**.



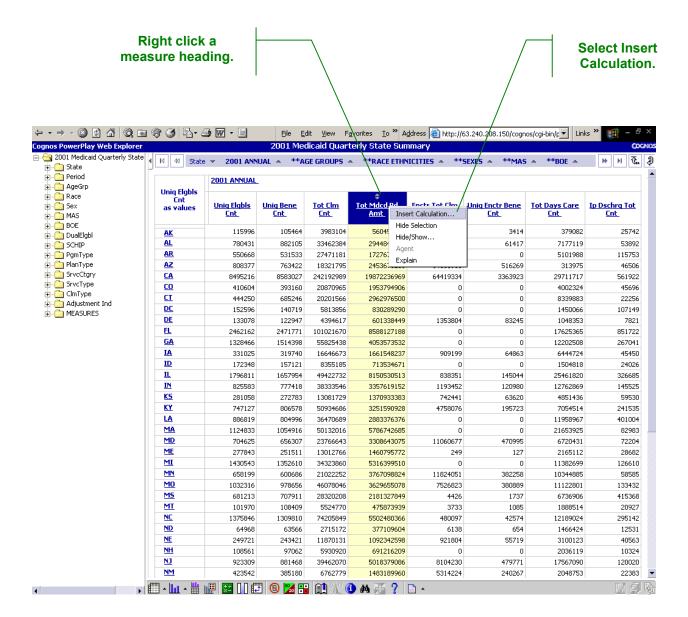
4. The display updates based on your selection.



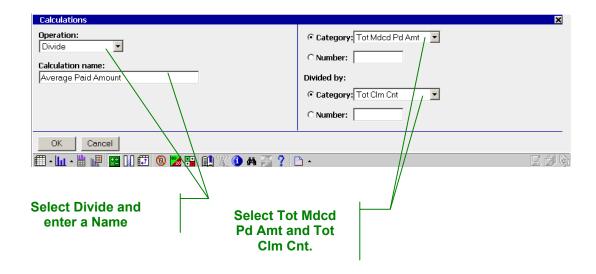
Calculating Measures

You can create new measures that are derived from the displayed values. For example, follow these steps to show the average paid amount per claim.

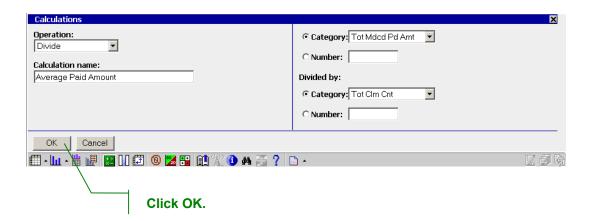
- 1. Right click the heading of any measure. A menu displays.
- 2. Select **Insert Calculation...** The Calculations window displays.



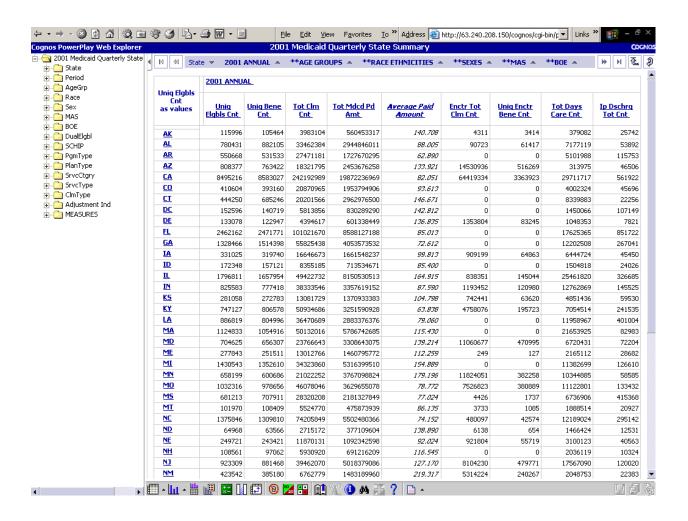
- 3. From the Operation drop-down list, select **Divide**.
- 4. Type in a Calculation Name. This name will be used as the column heading.
- 5. From the first Category drop-down list, select **Tot Mdcd Pd Amt**.
- 6. From the second Category drop-down list (after Divided by), select **Tot Clm Cnt**.



7. When the calculation is set up the way you wish, click **OK**.

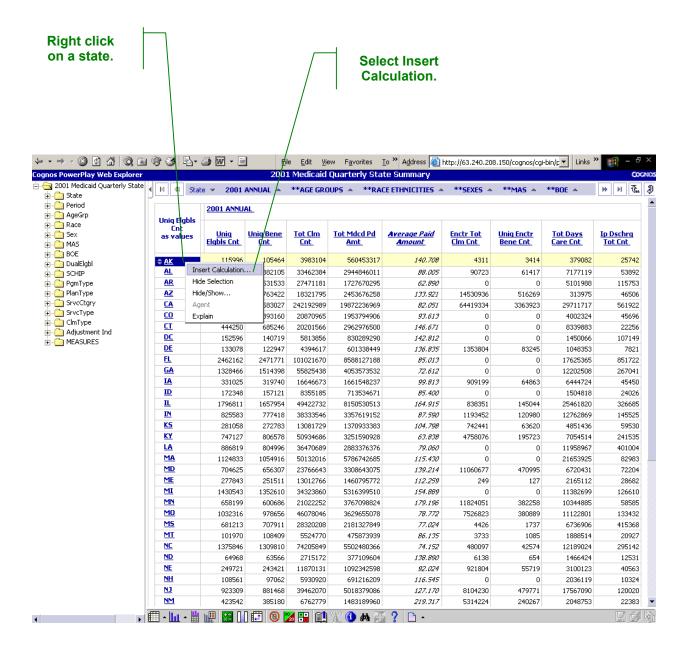


8. The display updates based on your selection. Note that calculated measures are in italics.

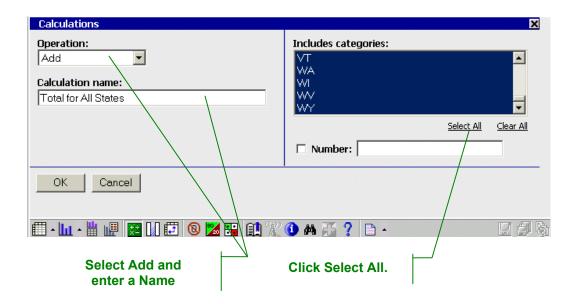


Follow these steps to create overall or national totals.

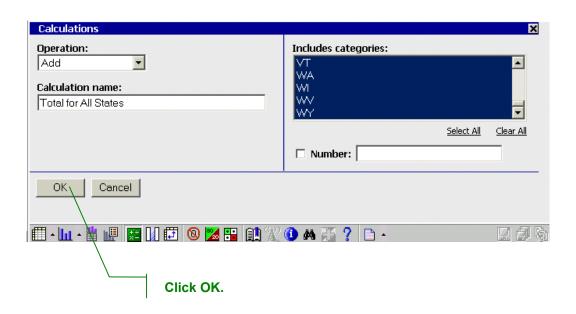
- 1. Right click on any state value. A menu displays.
- 2. Select Insert Calculation... The Calculations window displays.



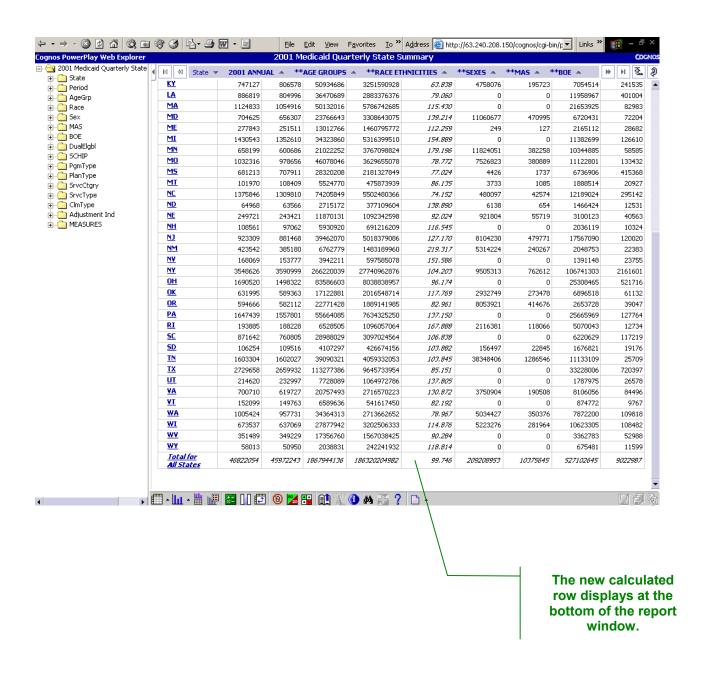
- 3. From the Operation drop-down list, select **Add**.
- 4. Type in a Calculation Name. This name will be used as the row heading.
- 5. Click **Select All** to include all states in the calculations.



6. When the calculation is set up the way you wish, click **OK**.



7. The display updates to show your calculations.



State Summary Dimensions

Understanding Dimension Values

The State Summary cubes structure information so that you can easily explore the interactions between different characteristics of the Medicaid program. The dimensions add levels of detail to this data.

The dimensions in the State Summary data cubes contain established code values and reference information. The dimensions in the quarterly data cubes are:

- State
- Period (Medicaid fiscal year and quarter)
- Adjustment Indicator
- Age Group
- Basis of Eligibility
- Claim Type
- Dual Eligible
- Maintenance Assistance Status
- Plan Type
- Program Type
- Race/Ethnicity
- SCHIP
- Service Category
- Service Type
- Sex

The dimensions in the monthly data cubes are:

- State
- Calendar Year Calendar Month (Medicaid fiscal year and month)
- Age Group
- Basis of Eligibility
- Dual Eligible (*beginning with FY2003 data*)
- Maintenance Assistance Status
- Plan Type
- Race/Ethnicity
- SCHIP
- Sex

A description of and the valid values for each dimension are listed in *Appendix A: MSIS State Summary Data Cubes*.

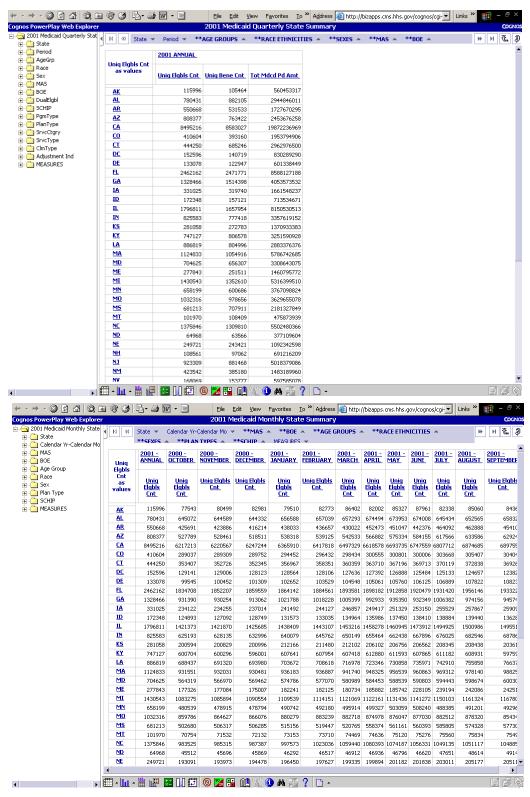
In addition to the valid code values, the dimensions have a value that is asterisks (**). The double-asterisk value is the top level of the dimension that has no detailed breakdown. This top level should always be selected when the dimension is not part of the display.

The only dimensions in the quarterly cube that do not have a top level are State and Period. The only dimensions in the monthly cube that do not have a top level are State and Year-Month.

The cubes have been created so that zeros are displayed in the cells when the dimension values have not been selected correctly.

Changing Dimensions

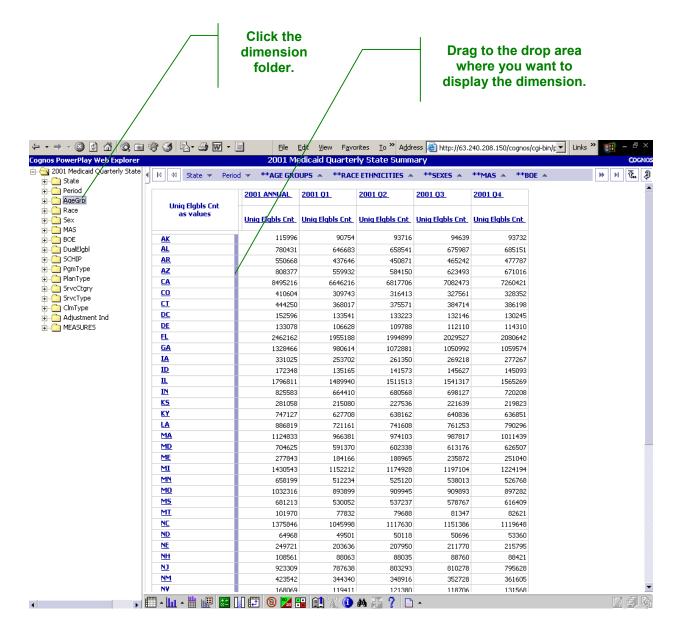
When viewing the State Summary cubes, you must always include the **State** and time dimensions. For the quarterly cubes, the time dimension is **Period** (Medicaid fiscal year and quarter). For the monthly cubes, the time is Medicaid fiscal year and month labeled as **Calendar Yr - Calendar Mo**. The default view of the cubes includes the State and time dimensions.



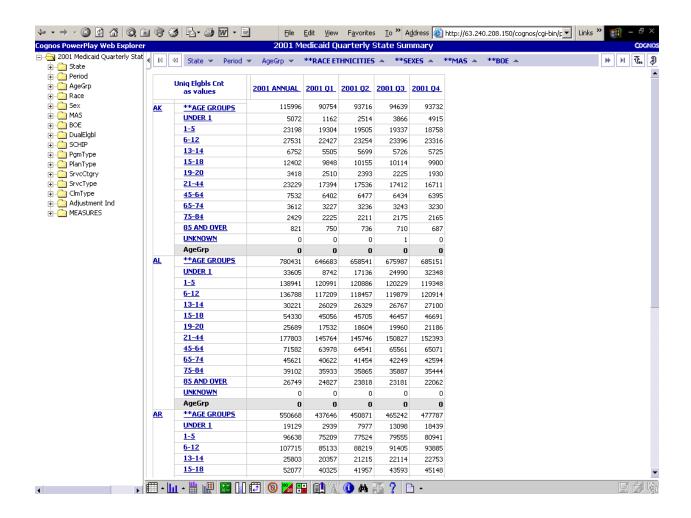
You can select up to four other dimensions in addition to the State and time.

To add a dimension to your display, follow these steps.

1. To include all dimension values, drag and drop the folder onto the row or column drop area of the display. A bold narrow line appears in spots where you can place the dimension.

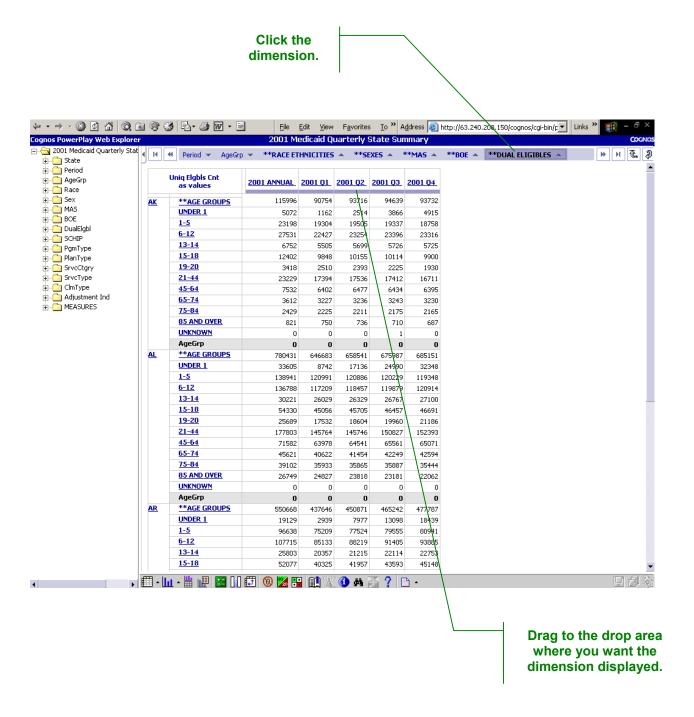


2. The display updates based on your selection.

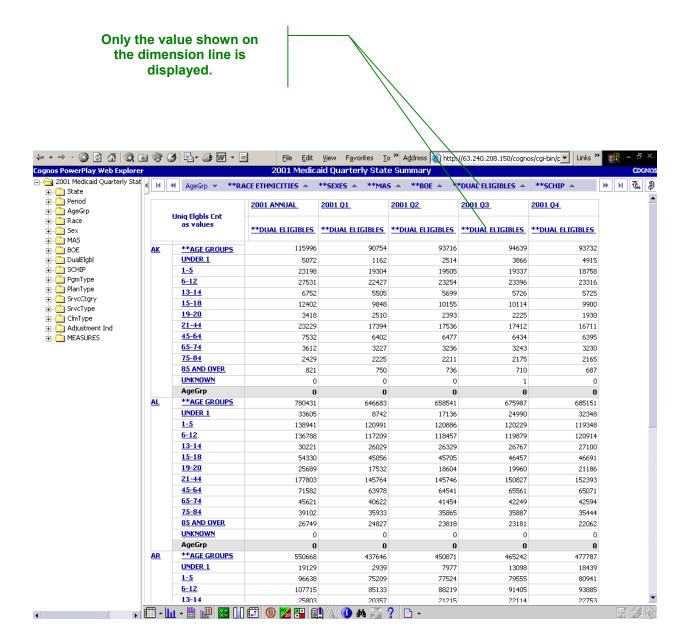


You can also drag and drop from the dimension line.

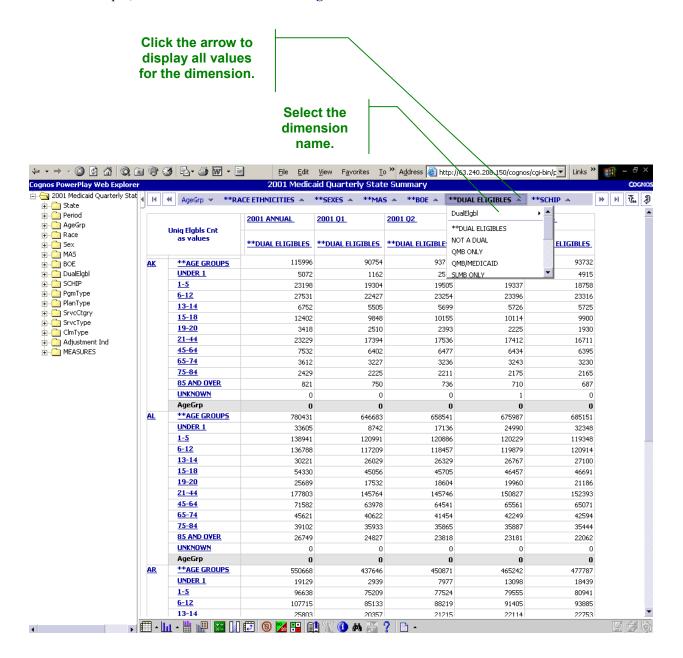
1. Click a dimension and drag it to a drop area. A bold narrow line appears in spots where you can place the dimension.



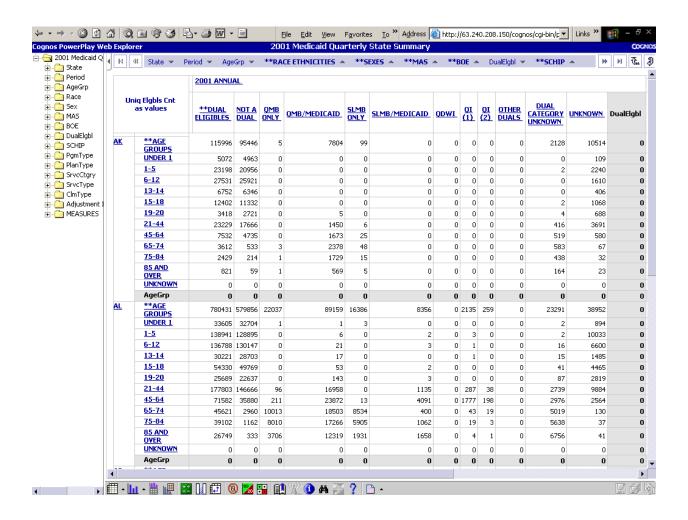
2. The display updates based on your selection. Notice that this method includes only the value displayed on the dimension line. In the example below, the value is **DUAL ELIGIBLES.



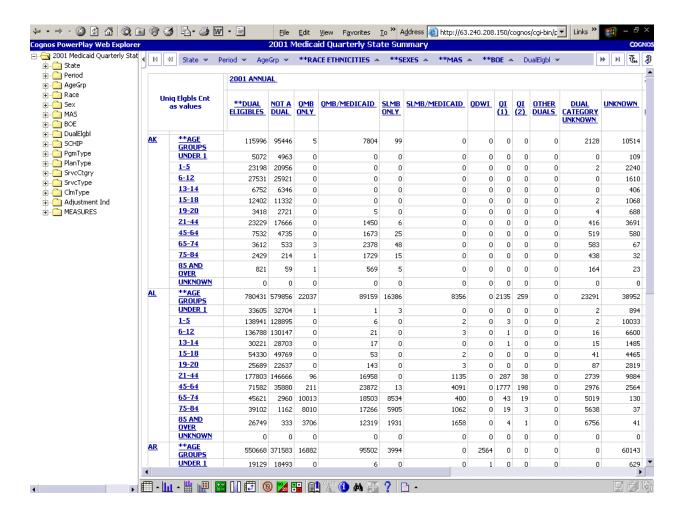
3. To show all the values, click the arrow next to the dimension label and select the dimension name. In this example, the dimension name is **DualElgbl**.



4. The display updates based on your selection.

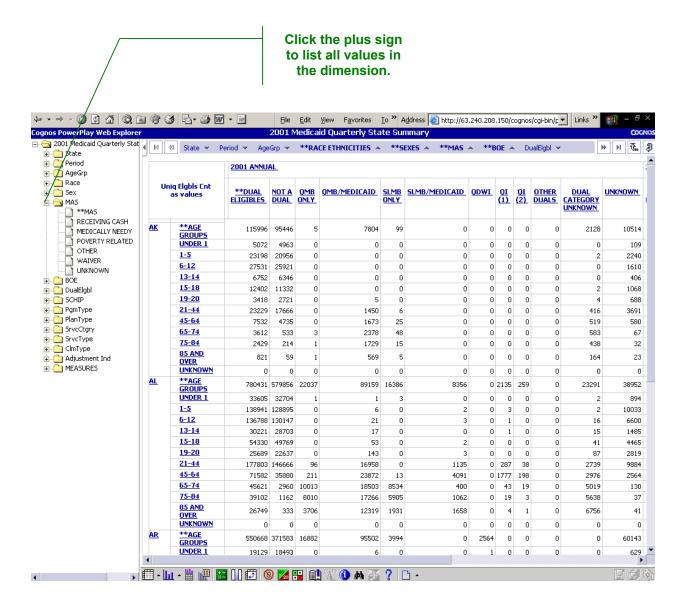


The summary rows and columns can be removed using the Hide/Show options as described above under State Summary Measures.

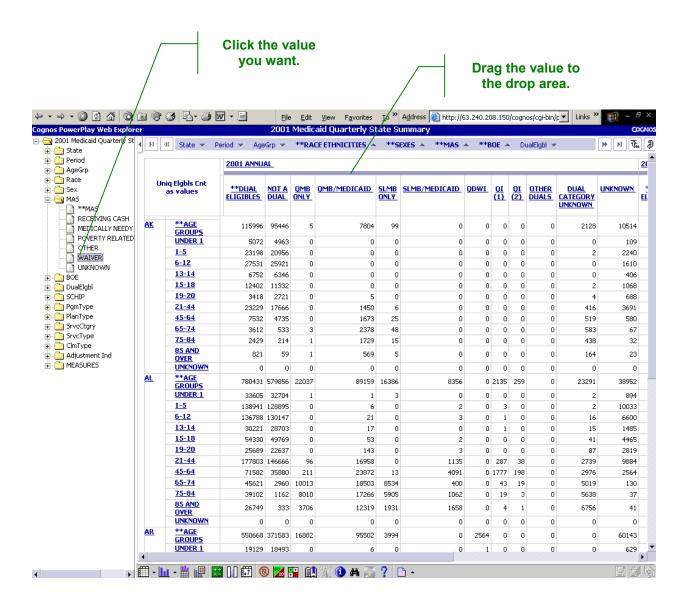


To add only one value from a dimension to your display, follow these steps.

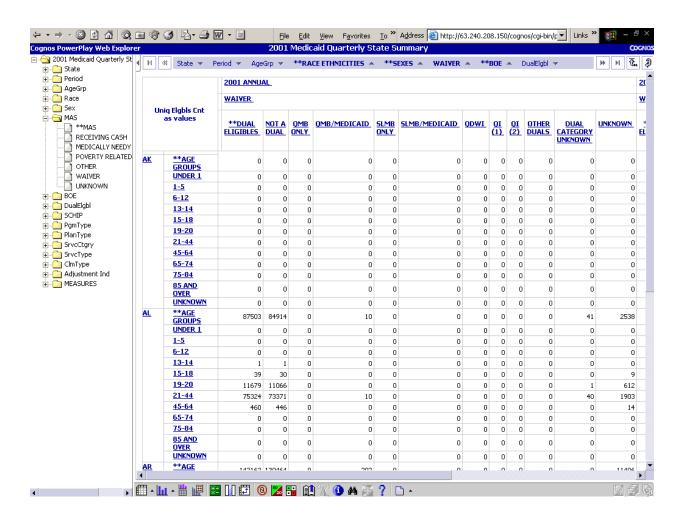
1. Click the plus sign (+) next to the folder for the dimension you want to add to the report. All values within the dimension are displayed.



2. Click the value and drag it to the drop area where you want it displayed.

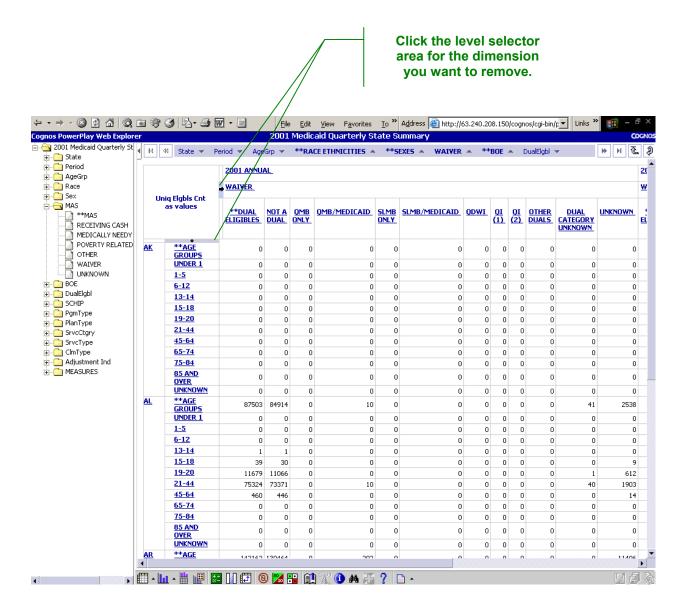


3. The display updates based on your selection.

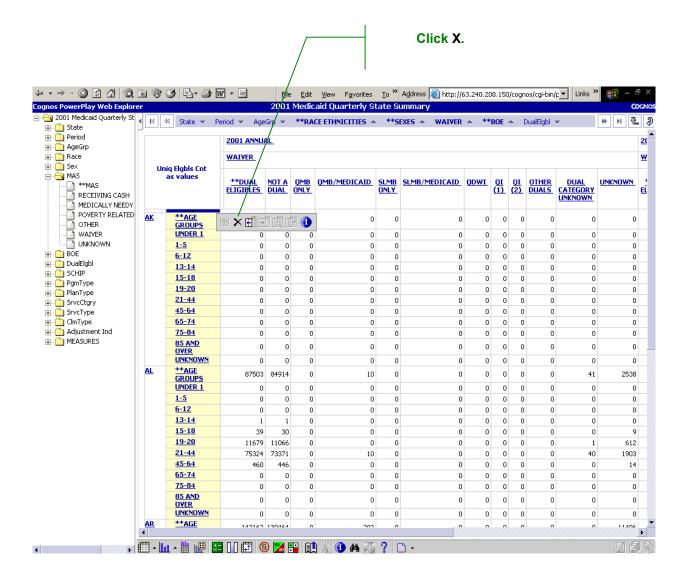


To remove a dimension from the display, follow these steps:

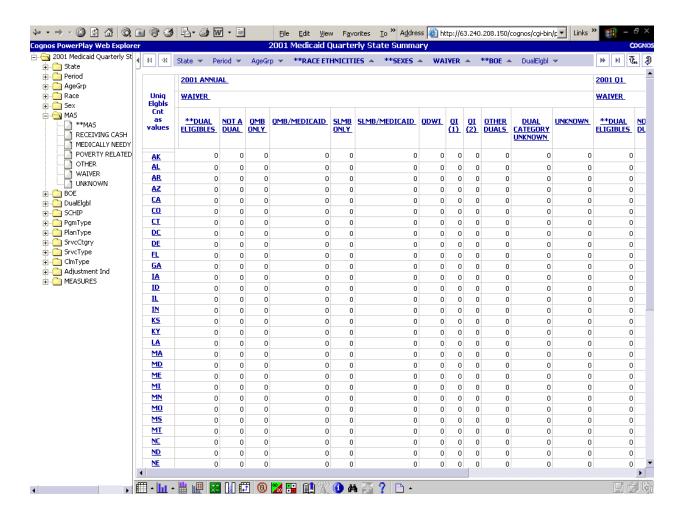
1. Click the level selector area for the dimension in the display panel that you want to remove. (The level selector area is the small box above the row labels and to the left of the column labels.) The level selector toolbar displays.



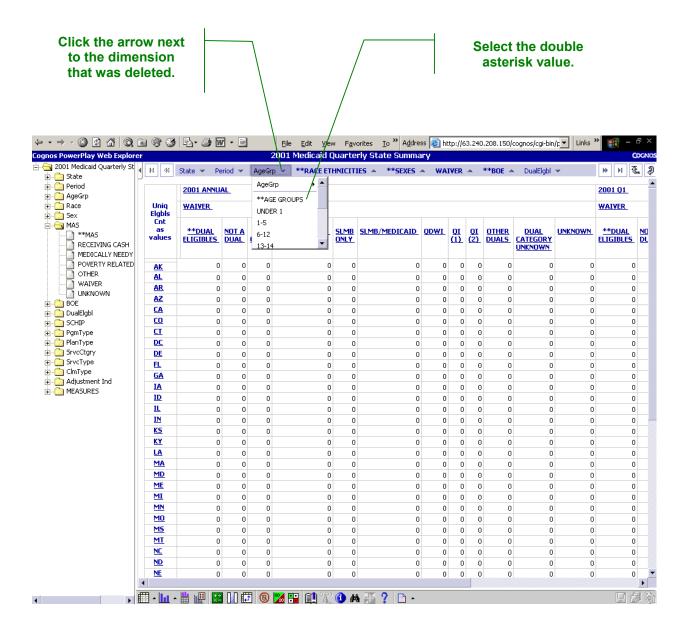
2. Click the delete button on the level selector toolbar.



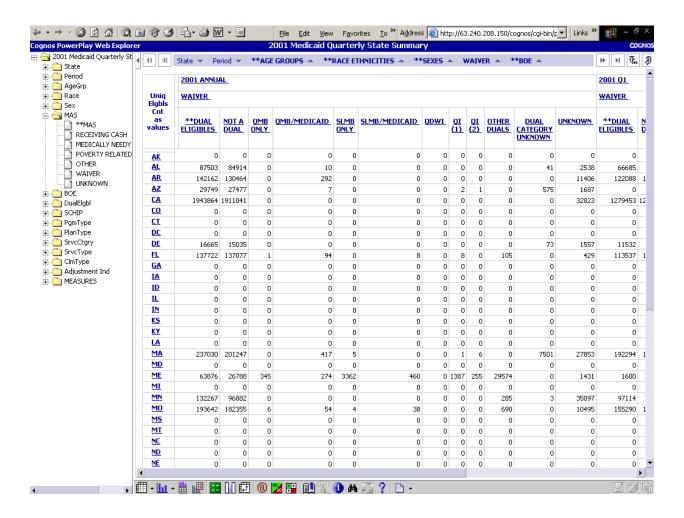
3. The display updates based on your selection. Note that all the measures show zero.



- 4. Click the arrow on the dimension line for the dimension that was just deleted. A list of dimension values displays.
- 5. Select the top level (the double asterisk value) of the deleted dimension.

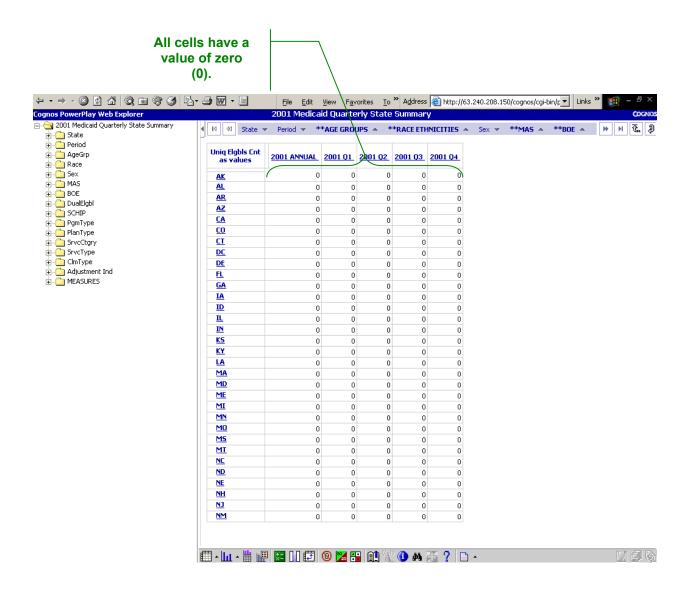


6. The display updates based on your selection.



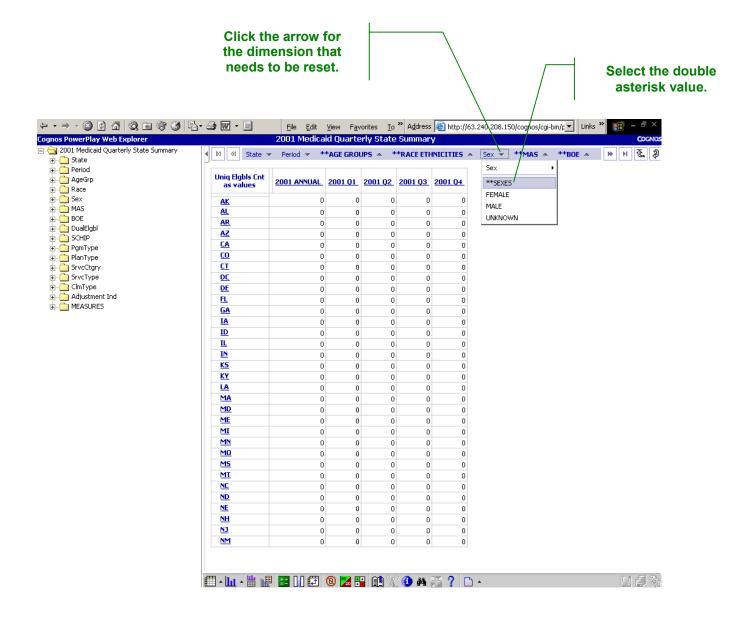
Troubleshooting Display Problems

All Zeros (0) in Cells

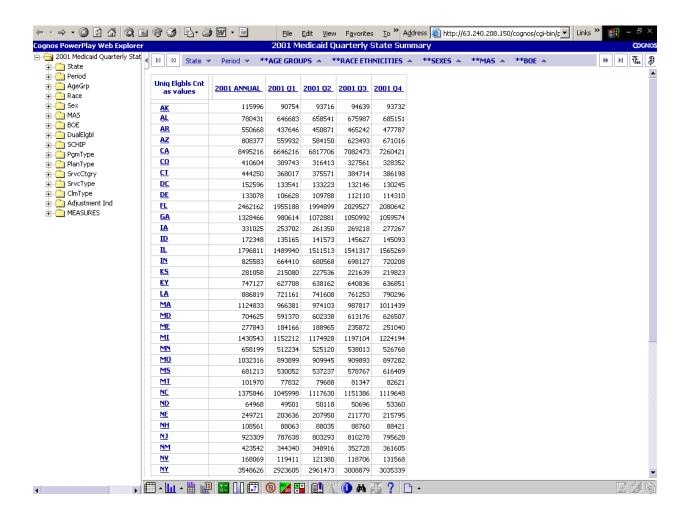


Zeros in all of the cells mean that the dimension levels are not set correctly. To set a dimension to the top level, follow these steps. Do this for each dimension that needs to be reset.

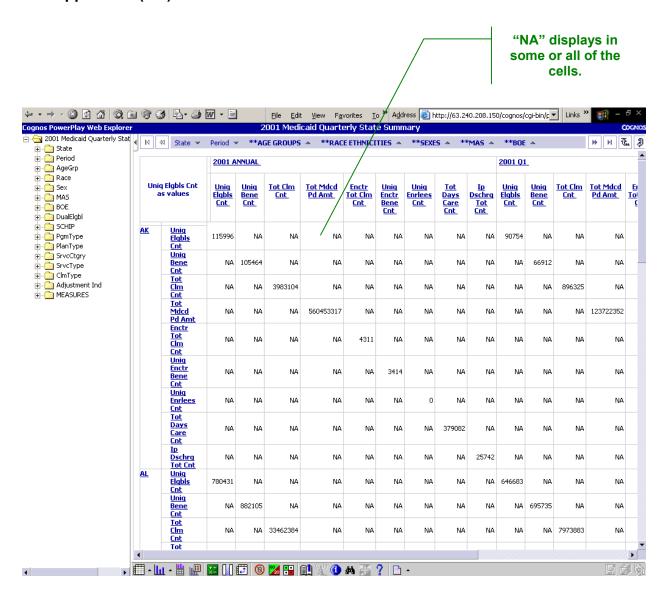
- 1. Click the arrow on the dimension line. A list of dimension values displays.
- 2. Select the top level (the double asterisk value).



3. The display updates based on your selection.

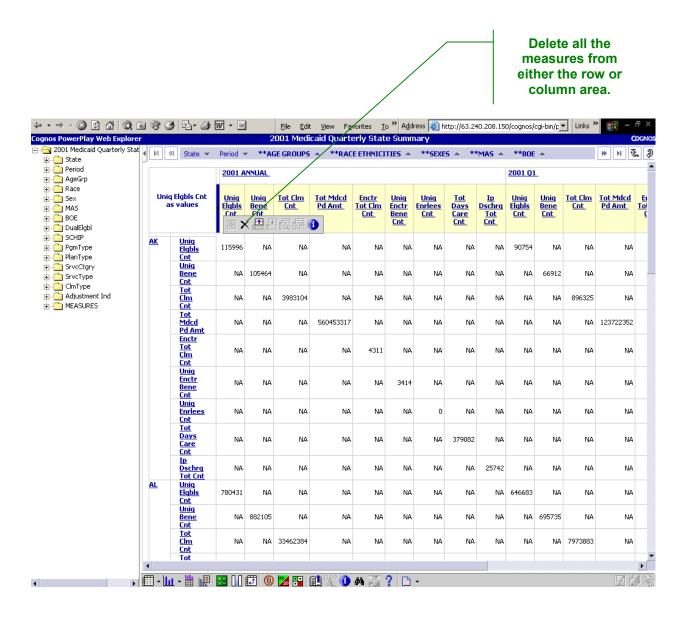


Not Applicable (NA) in Cells

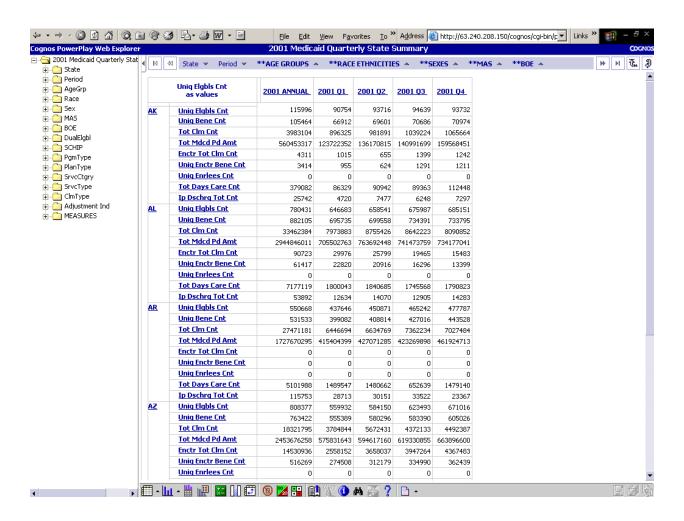


"NA" in some or all of the cells means that measures have been placed in both the row and column areas. To correct this problem, follow these steps.

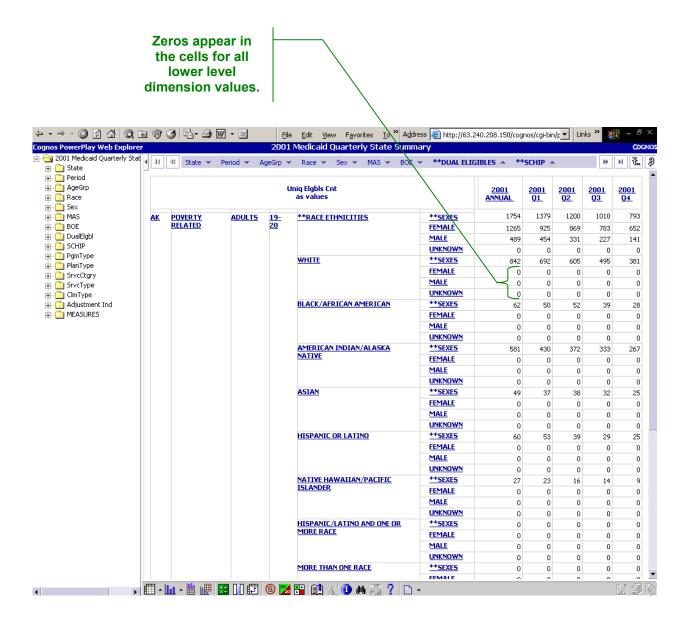
1. Delete all the measures from either the row or column area.



2. The display updates based on your selection.

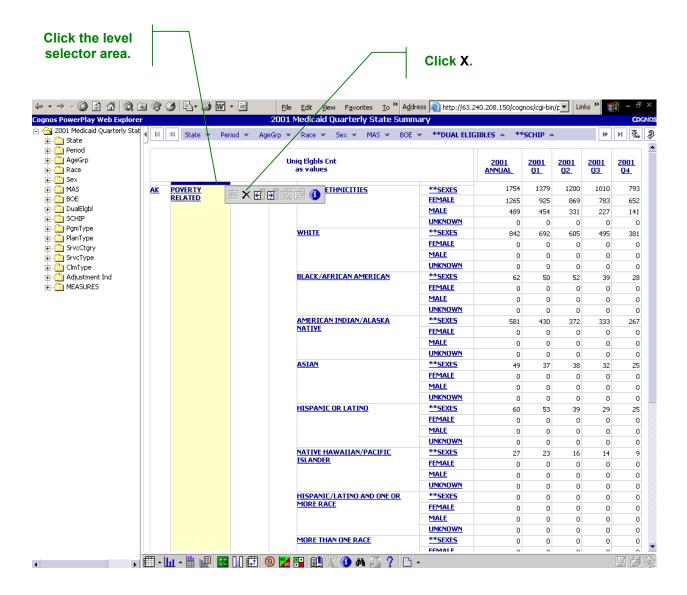


Zeros (0) in Cells for Lower Level Dimensions

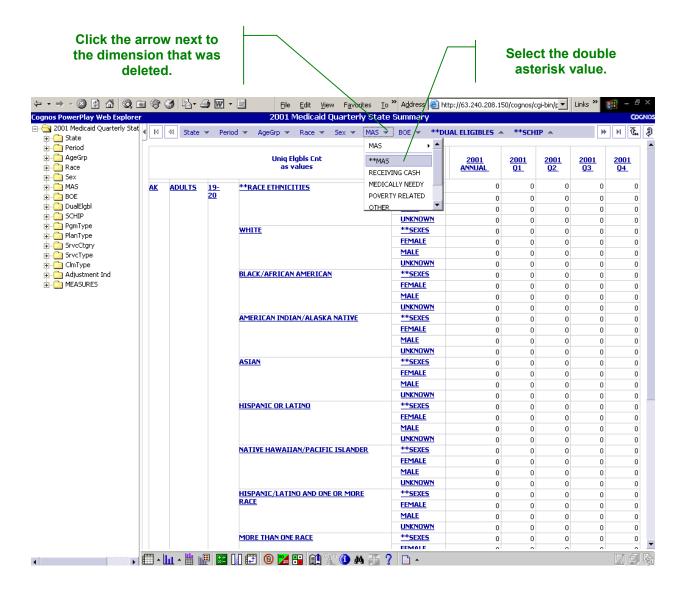


When zeros are displayed in the cells for all lower level dimension values, more than four dimensions (in addition to State and time period) have been selected. Delete one or more dimensions until four or fewer (in addition to the State and time period) are selected. For each dimension to be deleted, follow these steps.

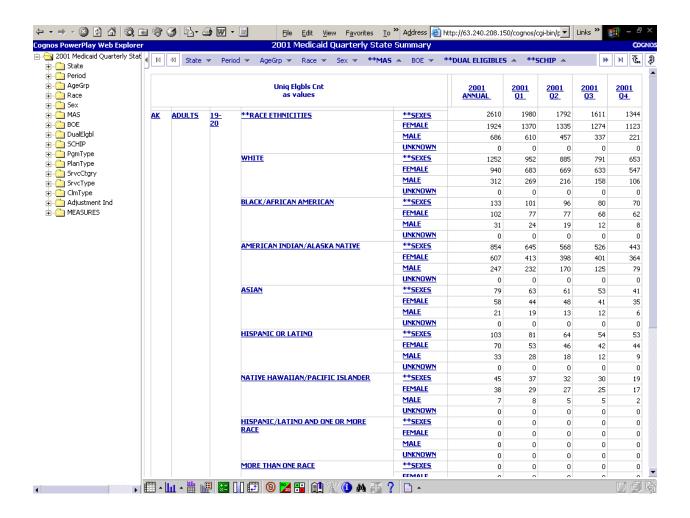
- 1. Click the level selector area for the dimension that you want removed from the display panel.
- 2. Click the delete button on the level selector toolbar.



- 3. After deleting each dimension, click the arrow on the dimension line to list the dimension values.
- 4. Select the top level (the double asterisk value) of the deleted dimension.



5. The display updates based on your selection.

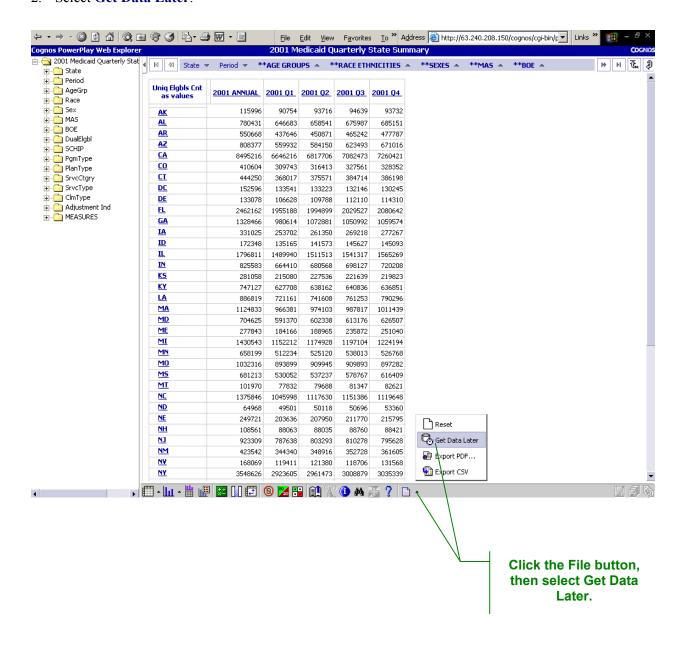


Helpful Hints

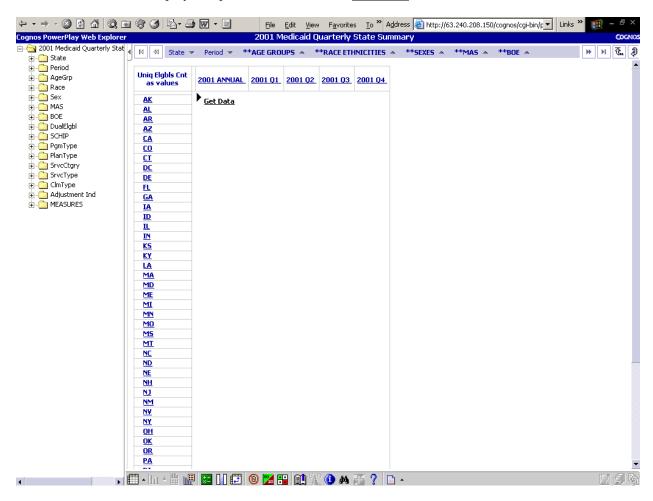
Faster Response Time

You can format the display without showing the data for each change. This makes the response time faster.

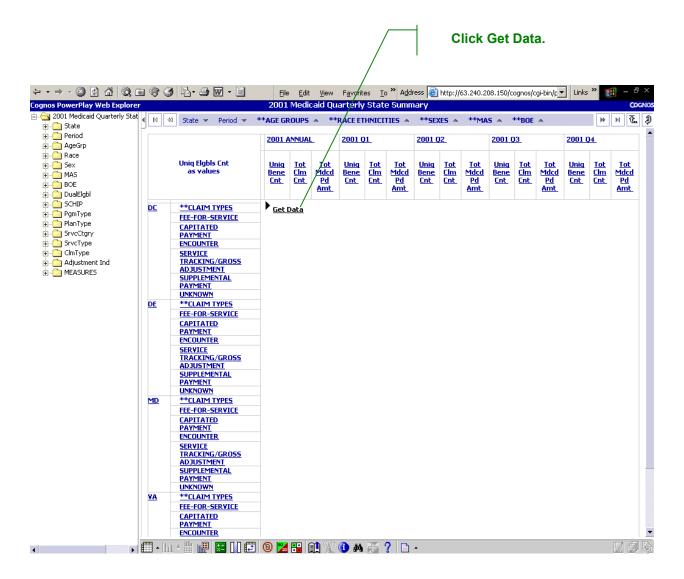
- 1. Click the File button on the PowerPlay toolbar. A menu displays.
- 2. Select Get Data Later.



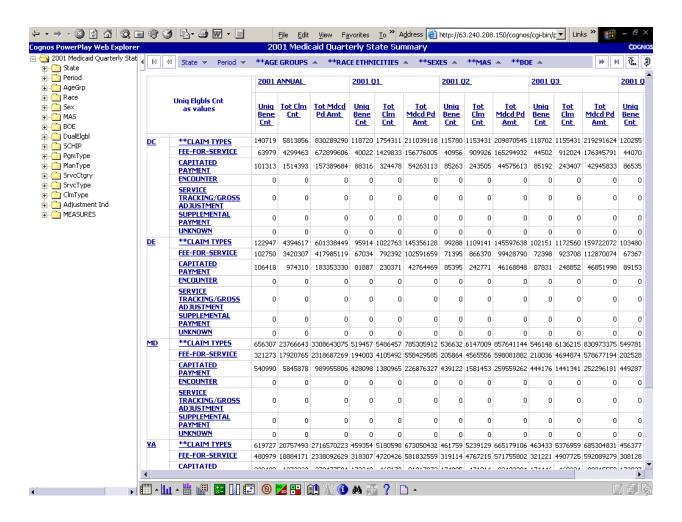
3. The middle of the display is replaced with the words **Get Data**.



4. Format the display to show the dimensions and measures you want. Click **Get Data** to retrieve the actual values.

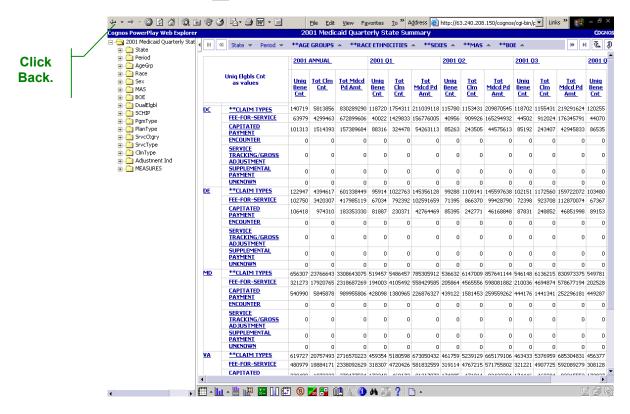


5. The display updates based on your selection.

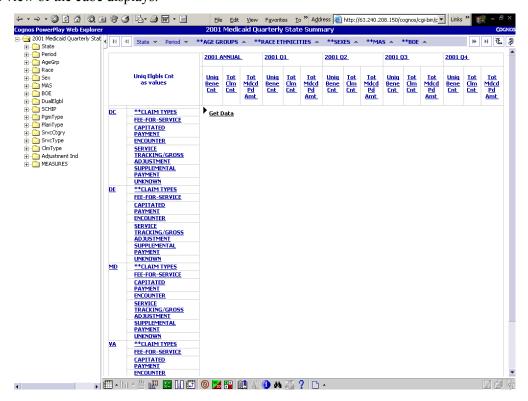


Undo Selection

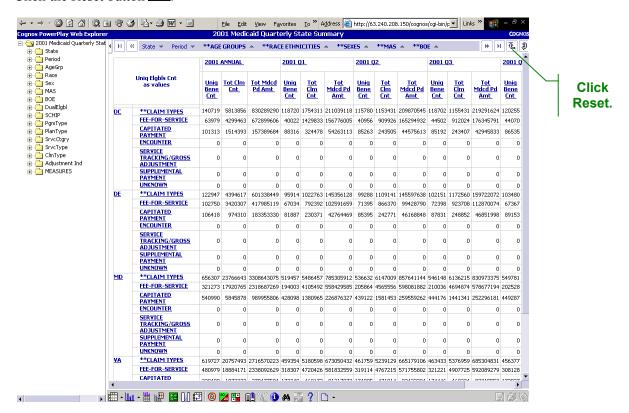
1. Click the browser's Back button.



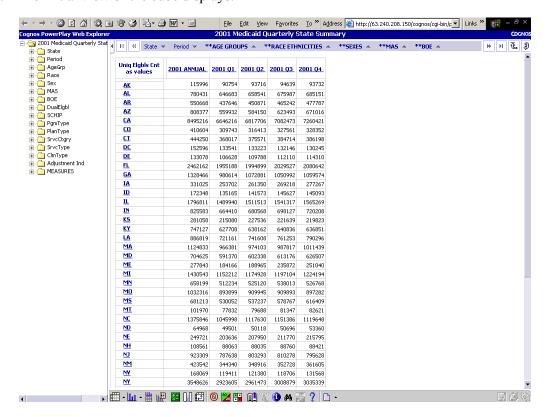
2. The previous view of the cube displays.



1. Click the Reset button



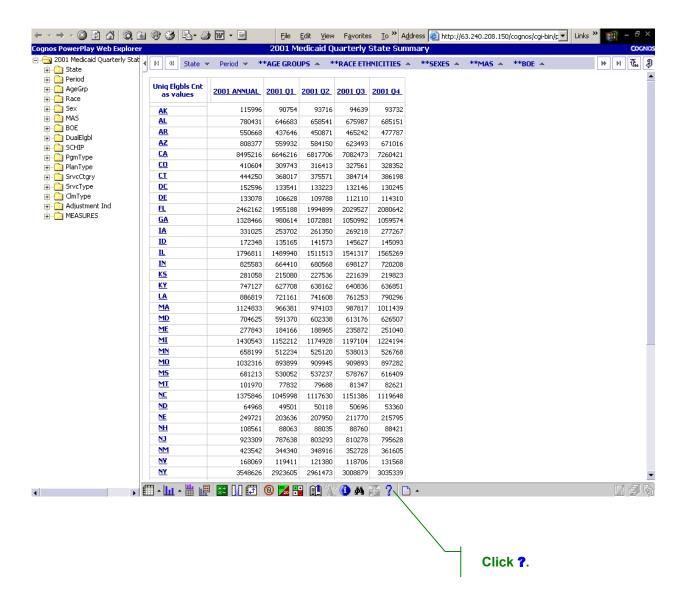
2. The initial view of the cube displays.



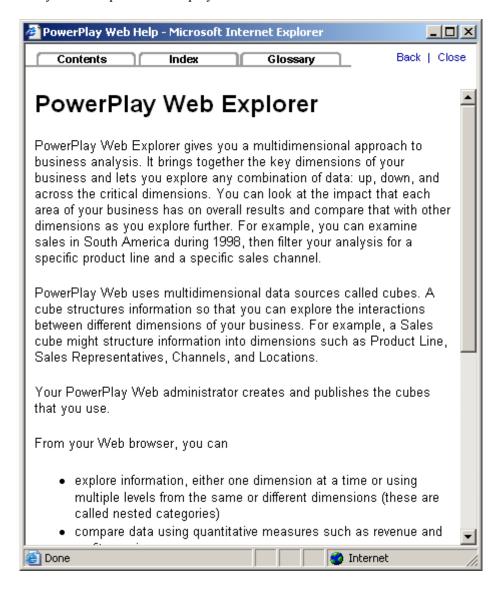
Additional Help

You can obtain further assistance by using the on-line Help function.

1. Click the Help button ? on the PowerPlay toolbar.



2. The PowerPlay Web Help window displays.



You can also send an e-mail to MSIS_Data_Marts@cms.hhs.gov. Please include your name and phone number in the message.

Notes:

Appendix A: MSIS State Summary Web Cubes

This appendix describes the dimensions and measures in the State Summary (SS) web cubes.

Medicaid Quarterly State Summary Web Cube

Dimension	Description	
Adjustment Indicator	Indicates whether or not the claim is an adjustment. Values are: Original Claim Void of a prior submission Re-submittal Credit Adjustment Debit Adjustment Gross Adjustment Unknown	
Age Group	Indicates the eligible's age group at the end of the federal fiscal year. Values are: Less than one year of age Ages 1-5 Ages 6-12 Ages 13-14 Ages 15-18 Ages 19-20 Ages 21-44 Ages 45-64 Ages 65-74 Ages 75-84 Ages 85 and Over Unknown	
Basis of Eligibility	Indicates the individual's basis of eligibility (BOE). Values are: Individual was not eligible for Medicaid at any time during the month Aged Individual Blind/Disabled Individual Not Used Child (not Child of Unemployed Adult, not Foster Care Child) Adult (not based on unemployed status) Child of Unemployed Adult Unemployed Adult Foster Care Child Breast and Cervical Cancer Act (BCCA) Eligibility status unknown	
Claim Type	Indicates the type of claim. Values are: Fee-For-Service Capitated Payment Encounter Service Tracking/Gross Adjustment Supplemental Payment Unknown	

March 2004 A-1

Dimension	Description
Dual Eligible	Indicates the type of dual eligibility of an individual if any. Values are: Not a Medicare beneficiary Qualified Medicare Beneficiaries (QMB) only QMB and full Medicaid coverage Specified Low-Income Medicare Beneficiaries (SLMB) only SLMB and full Medicaid coverage Qualified Disabled and Working Individuals (QDWI) Qualifying Individuals (QI) 1 Qualifying Individuals (QI) 2 Other Dual Eligibles Dual Eligibility Category unknown Medicare status is unknown
Maintenance Assistance Status	Indicates an eligible's maintenance assistance status (MAS). Values are: Individual was not eligible for Medicaid this month Receiving Cash or Eligible under section 1931 of the Act Medically Needy Poverty Related Other 1115 – Demonstration expansion eligibles Unknown
Period	The fiscal year and fiscal quarter values. For annual counts, the fiscal quarter value is 0. This dimension must always be selected. Note: The Medicaid fiscal year is from October 1 through September 30.
Plan Type	The plan type under which the eligible individual is covered during the month or a claim was paid. Values are: Not eligible for Medicaid Medical or comprehensive managed care plan (e.g., HMO) Dental managed care plan Behavioral managed care plan Prenatal/delivery managed care plan Long-term care managed care plan Program for All-Inclusive Care for the Elderly (PACE) Primary care case management managed care plan (PCCM) Other managed care plan Not applicable Unknown One or more managed care plans (applies to enrollment only – for FY1999 and FY2000 this category includes Unknown plan enrollees)
Program Type	Indicates special Medicaid program under which the service was provided. Values are: No Special Program Early and Periodic Screening, Diagnosis and Treatment (EPSDT) Family Planning Rural Health Clinic Federally Qualified Health Centers (FQHC) Indian Health Services Home & Community Based Care for Disabled Elderly & Individuals Age 65 & Older Home and Community Based Care Waiver Services Unknown

A-2 March 2004

Dimension	Description
Race/Ethnicity	Indicates the eligible's race/ethnicity. Values are: White Black or African American American Indian or Alaska Native Asian Hispanic or Latino (No race information available) Native Hawaiian or Other Pacific Islander Hispanic or Latino and one or more races More than one race (Hispanic or Latino not indicated) Unknown
SCHIP	Indicates an individual's inclusion in the SCHIP program. Values are: Individual was not a Medicaid eligible and not eligible for SCHIP Individual was Medicaid eligible, but was not included in either Medicaid expansion SCHIP or a separate Title XXI SCHIP program Individual was included in the Medicaid expansion SCHIP program and subject to enhanced Federal matching Individual was not Medicaid eligible, but was included in a non-Medicaid expansion Title XXI SCHIP program SCHIP status unknown
Service Category	Represents the roll-up of Service Type into higher-level categories. Values are: Capitated Care Clinical Services Dental Services Home Health Services Intermediate Care Facility Services for the Mentally Retarded (ICFMR) Inpatient Hospital Services Lab and X-ray Services Mental Health Facility Services Nursing Facility Services Other Care Outpatient Hospital Services Other Practitioner's Services Primary Care Case Management (PCCM) Prescribed Drugs Physician Services Personal Support Services Sterilizations Unknown
Service Type	Indicates the type of service that was billed. Values are: Inpatient Hospital Mental Hospital Services for the Aged Inpatient Psychiatric Facility Services for Individuals Age 21 Years and Under ICF Services for the Mentally Retarded Nursing Facilities – All Other Physicians Dental Other Practitioners Outpatient Hospital Clinic Home Health Lab and X-Ray

March 2004 A-3

Dimension	Description
	Prescribed Drugs Other Services Capitated Payments to HMO or Health Insurance Organization (HIO) Plan Capitated Payments to Prepaid Health Plans (PHPs) Capitated Payments for Primary Care Case Management (PCCM) Sterilizations Abortions Transportation Services Personal Care Services Targeted Case Management Rehabilitation Services Physical Therapy, Occupational Therapy, Speech, Hearing, or Language Services Hospice Benefits Nurse Midwife Services Nurse Practitioner Services Private Duty Nursing Religious Non-Medical Health Care Institutions Unknown
Sex	Indicates the gender of the eligible person. Values are: Female Male Unknown
State	The standard two-character abbreviation used by the US Postal Service for the state or territory. This dimension must always be selected.

Measure	Description
Encounter Total Claims Count	Total number of encounter claims adjudicated during the period
Inpatient Discharge Total Count	Total number of discharges from inpatient care during the period
Total Claims Count	Total number of non-encounter claims adjudicated during the period
Total Days of Care Count	Total days of care reported on non-encounter claims that were adjudicated during the period
Total Medicaid Paid Amount	Total dollar amount Medicaid paid on claims that were adjudicated during the period
Unique Beneficiaries Count	Distinct count of entities for whom a non-encounter claim having a positive paid amount was adjudicated during the period
Unique Eligibles Count	Distinct count of eligibles for the period
Unique Encounter Beneficiaries Count	Distinct count of entities for whom an encounter claim was adjudicated during the period
Unique Enrollees Count	Distinct count of managed care enrollees for the period
	Note : The Unique Enrollees Count is only calculated when Plan Type is one of the dimensions. When Plan Type is not a selected dimension, the Unique Enrollees Count is zero.

A-4 March 2004

Medicaid Monthly State Summary Web Cube

Dimension	Description
Age Group	Indicates the eligible's age group at the end of the federal fiscal year. Values are: Less than one year of age Ages 1-5 Ages 6-12 Ages 13-14 Ages 15-18 Ages 19-20 Ages 21-44 Ages 45-64 Ages 65-74 Ages 75-84 Ages 85 and Over Unknown
Basis of Eligibility	Indicates the individual's basis of eligibility (BOE). Values are: Individual was not eligible for Medicaid at any time during the month Aged Individual Blind/Disabled Individual Not Used Child (not Child of Unemployed Adult, not Foster Care Child) Adult (not based on unemployed status) Child of Unemployed Adult Unemployed Adult Foster Care Child Breast and Cervical Cancer Act (BCCA) Eligibility status unknown
Dual Eligible (included in monthly cubes beginning with FY2003 data)	Indicates the type of dual eligibility of an individual if any. Values are: Not a Medicare beneficiary Qualified Medicare Beneficiaries (QMB) only QMB and full Medicaid coverage Specified Low-Income Medicare Beneficiaries (SLMB) only SLMB and full Medicaid coverage Qualified Disabled and Working Individuals (QDWI) Qualifying Individuals (QI) 1 Qualifying Individuals (QI) 2 Other Dual Eligibles Dual Eligibility Category unknown Medicare status is unknown
Maintenance Assistance Status	Indicates an eligible's maintenance assistance status (MAS). Values are: Individual was not eligible for Medicaid this month Receiving Cash or Eligible under section 1931 of the Act Medically Needy Poverty Related Other 1115 – Demonstration expansion eligibles Unknown

March 2004 A-5

Dimension	Description
Plan Type	The plan type under which the eligible individual is covered during the month. Values are: Not eligible for Medicaid Medical or comprehensive managed care plan (e.g., HMO) Dental managed care plan Behavioral managed care plan Prenatal/delivery managed care plan Long-term care managed care plan Program for All-Inclusive Care for the Elderly (PACE) Primary care case management managed care plan (PCCM) Other managed care plan Not applicable Unknown One or more managed care plans (applies to enrollment only – for FY1999 and FY2000 this category includes Unknown plan enrollees)
Race Ethnicity	Indicates the eligible's race/ethnicity. Values are: White Black or African American American Indian or Alaska Native Asian Hispanic or Latino (No race information available) Native Hawaiian or Other Pacific Islander Hispanic or Latino and one or more races More than one race (Hispanic or Latino not indicated) Unknown
SCHIP	Indicates an individual's inclusion in the SCHIP program. Values are: Individual was not a Medicaid eligible and not eligible for SCHIP Individual was Medicaid eligible, but was not included in either Medicaid expansion SCHIP or a separate Title XXI SCHIP program Individual was included in the Medicaid expansion SCHIP program and subject to enhanced Federal matching Individual was not Medicaid eligible, but was included in a non-Medicaid expansion Title XXI SCHIP program SCHIP status unknown
Sex	Indicates the gender of the eligible person. Values are: Female Male Unknown
State	The standard two-character abbreviation used by the US Postal Service for the state or territory. This dimension must always be selected.
Year - Month	The fiscal year and month value. This dimension must always be selected. Note: The Medicaid fiscal year is from October 1 through September 30.

A-6 March 2004

Measure	Description
Eligible Full Period Count	Distinct count of individuals who were eligible for the entire period
Total Months Eligible Count	Total number of person-months of eligibility during the period
Unique Eligibles Count	Distinct count of eligibles for the period
Unique Enrollees Count	Distinct count of managed care enrollees for the period Notes: The Unique Enrollees Count is only calculated when Plan Type is one of the dimensions. When Plan Type is not a selected dimension, the Unique Enrollees Count is zero. The Unique Enrollees Count is not included in the monthly State Summary cube for FY 1999.

March 2004 A-7